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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR     | ATTORNEY DOCKET NO.         | CONFIRMATION NO.       |
|---|-------------|--------------------------|-----------------------------|------------------------|
| 10/588,634  | 08/04/2006  | Georges Phillipe Crispin | 9637-000082/US/NP           | 9802                   |
| 27572 7590 10/27/2008<br>HARNESS, DICKEY & PIERCE, P.L.C.<br>P.O. BOX 828<br>BLOOMFIELD HILLS, MI 48303 |             |                          | EXAMINER<br>FISHMAN, MARINA |                        |
|   |             |                          | ART UNIT<br>2832            | PAPER NUMBER           |
|   |             |                          | MAIL DATE<br>10/27/2008     | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/588,634 | <b>Applicant(s)</b><br>CRISPIN, GEORGES PHILLIPE |  |
|                              | <b>Examiner</b><br>Marina Fishman    | <b>Art Unit</b><br>2832                          |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/04/2006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***General status***

1. This is a First Action on the Merits. Claims 1 - 13 are pending in the case and are being examined.

### ***Claim Objections***

2. Claims 1 – 13 are objected to because of the following informalities:

Claim 1, the preamble recites “A sensor comprising a plurality of layers, comprising”, should be changed to -- A sensor including a plurality of layers, comprising--.

Claims 2 – 12 recite “A sensor” should be corrected as –The sensor--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charles, Braue [US 3,617,666] in view of Talmage, Jr. et al. [US 4,687,885].

Regarding Claims 1 and 13, Charles Braue discloses a sensor with a plurality of layers, comprising:

- a first mask layer [14];
- a second mask layer [2];

- a third mask layer and a separator layer [4] disposed between the first and second mask layers and defining an aperture; and
- a first conductive layer [5] disposed between the first mask layer and the third mask layer;
- a second conductive layer [3] disposed between the second mask layer and the third mask layer; and
- the separator layer being configured to separate the first and second conductive layers when no pressure is applied to the sensor [Figure 2] and to allow electrical contact between the first and second conductive layers during a mechanical interaction with the sensor [Figure 3], wherein each mask layer is formed from an electrically insulating material and has at least one side attached to another of the mask layers by adhesive [column 2, lines 35 - 65].

Regarding Claims 1 and 13, Charles Braue discloses the instant claimed invention except for the third mask layer and separator layers and integral. Talmage, Jr. et al. [Figure 3] disclose a sensor with a third mask layer [46] with an aperture and a separator layer [32] extending across the aperture of the third mask layer. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a third mask layer in a form of a frame and a separator layer extending across the aperture of the third mask layer in Charles Braue, as suggested by Talmage, Jr. et al., in order to change the resiliency of the

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third mask layer. Regarding Claim 13, the combination of Charles Braue and Talmage, Jr. et al disclose method steps of assembling a sensor, including obtaining first and second masks, location first and second conductive layers, obtaining third mask with an aperture and attaching the mask layers with an adhesive. Regarding Claim 2, Charles Braue and Talmage, Jr. et al. disclose claimed invention except for the third mask layer having smaller dimensions than the first and second mask layers. Providing third mask layer with smaller dimension absent any criticality is considered to be nothing more than a choice of engineering skill, choice of design because 1) neither non-obvious nor unexpected results, i.e., results which are different in kind and not in degree from the results of the prior art, will be obtained as long as profile arrangement is able to be attached to the base, 2) the smaller dimension of the second mask claimed by the Applicant and that disclosed by Braue will perform the same function, if one is replaced with the other, and 3) the use of the smaller dimension of the second mask claimed by Applicant is considered to be nothing more than the use of one of numerous and well known alternate types profile attachment arrangements, that a person having ordinary skill in the art would have been able to provide using routine experimentation in order to attach the first mask layer with the second mask layer as already suggested by Braue. Regarding Claim 3, Charles Braue discloses a sensor in which the sensor further comprises a conductive track [13] for applying electrical potentials to the first conductive layer, wherein a portion of the conductive track is disposed directly on the first mask layer and a portion is positioned directly on the conductive layer. Regarding Claim 4, Charles Braue discloses end portions of the conductive tracks are taken as tabs (for further connection). Regarding Claim 5, the conductive tracks are disclosed as tracks on fabric [column 2, line 11]. Regarding Claim 6, the

fabric comprises electrically conductive fibers [13]. Regarding Claim 7, Charles Braue discloses a sensor wherein the first and second mask layers are continuous layers [Figures 1 and 2] whereby the sensor is protected against ingress of moisture or other contaminants. Regarding Claims 8, 9 and 10, Charles Braue discloses claimed invention except for a masks being formed of a plastic or polyurethane material and the adhesive being thermoplastic. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the masks from plastic or polyurethane, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). The motivation for selecting these materials is to achieve desired mechanical strength coupled with electrical insulative and adhesive properties. Regarding Claims 11 and 12, Charles Braue discloses the separator layer is formed from a mesh material and wherein the sensor is configured to generate signals in response to mechanical interactions, the signals representing X-axis and Y-axis co-ordinate data of mechanical interactions within the sensing area of the sensor, due to contact between conductive tracts [13, 13] and the one contact point has a different resistance than another contact point due to different X and Y resistance.

### **Conclusion**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Maser [US 4857683], Sandbach [US 6,504,531], Sandbach [US 6452479], Applicant also should consider these references in response to this office action. Should issue arise concerning the rejection presented above, these references

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may be relied upon in a subsequent action to support the lack of novelty or obviousness of claimed subject matter to one of ordinary skill in the art.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Fishman whose telephone number is (571)272-1991. The examiner can normally be reached on 7-5 M-T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elvin G Enad/  
Supervisory Patent Examiner, Art Unit 2832

/Marina Fishman/  
Examiner, Art Unit 2832  
October 21, 2008

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